IT PROJECT EVALUATION

Project Tracking No.:E-001-FY03-DHS

Return on Investment Program Funding Application (FY 2003 Request)

This is an electronic template. Please enter your responses on this document. Only electronic submittals of this template will be accepted. Proposals submitted after the designated due date may not receive funding consideration.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform a final project outcome audit, after implementation, for all Pooled Technology funded projects.

SECTION I: PROPOSAL

Date: 5/9/01

Agency Name: State Training School

Project Name: Campus Network Update

Expenditure Name: Campus Network Update

Agency Manager: Bill Harner

Agency Manager Phone Number / E-mail: 641-858-5402/bharner@dhs.state.ia.us

Executive Sponsor (Agency Director or Designee): Steve Huston

Request For ROI Application Waiver:

Agencies are required to complete this funding application when requesting funds for any project, any IT expenditure costing over $100,000, or any non-routine IT expenditure. If you feel there is compelling reason to waive this requirement, please provide (in the box provided below) a brief description of the project or expenditure, the budget amount, and a rationale for the waiver request. Until a decision is made regarding your waiver request, it is not necessary to complete any other portion of this application. The ITD Enterprise Quality Assurance Office will convey waiver request decisions within five working days of receipt.

Explanation:

A. Project or Expenditure Rationale

Is this project or expenditure necessary for compliance with a Federal standard, initiative, or statute? ☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Is this project or expenditure required by State statute? ☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Does this project or expenditure meet a health, safety or security requirement?
☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☒ **YES** (If "YES," explain) ☐ **NO**

Explanation: Enterprise Technology Standards require that fiber between buildings be "home run" and not "dasiy chained". "Home Run" refers to the fiber going from a central location directly to each building, thus having a dedicated fiber to that one building or location. "Daisy chain" is when the fiber goes from a central location to the closest building and then from that building to the next building and etc. For example when four buildings are "dasiy chained" on the same fiber it limits the network resources to each building.

Is this project or expenditure consistent with meeting the goals and objectives of the State's strategic plans?
☒ **YES** (If "YES," explain) ☐ **NO**

Explanation: Would apply to IOWA 2010 Goal 2, Electronically Connected to Each Other and the World.

Is this a "research and development" project or expenditure? ☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

B. Project or Expenditure Summary

1. Provide a pre-project or pre-expenditure (before implementation) and a post-project or post-expenditure (after implementation) description of the impacted system or process. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response:
Pre-project: We presently have a fiber backbone system installed at the State Training School. When the Campus Area Network was installed the fiber was installed to allow for a fiber "Home Run" to each building but the switching only allows for a "Daisy Chain" to each building. This uses 2 strands of fiber to service all the buildings (17).

Post-project: The "Home Run" solution will dedicate 2 strands of fiber for each on the 17 buildings. See the benefits of this in the explanation of "Home Run" in Section I, A. This project is necessary for compliance with an enterprise technology standard.

The following is an excerpt from the Enterprise Policy on Network Infrastructure:
That the design, specifications, requirements, selection of network components and implementation of the Department's infrastructure will be the responsibility of the Division of Data Management, Department of Human Services working with ICN and ITS.

This is required to ensure a statewide corporate view of a secured data network that takes all aspects of data, applications and messaging into consideration, not only between all entities of DHS but other agencies, states and federal systems as well.

This includes the network servers, hubs, switches, internal routers, ups systems and wiring at any DHS local site or institution. Internal data fiber, termination of data fiber or risers also falls under the responsibility of DDM. Edge routers (routers that connect to the ICN) and LEC (local exchange carriers) will be coordinated by DDM/DHS and ICN. All of this equipment will be administered and managed by the DDM/DHS and ICN using Network management tools (i.e., HP Openview) with the cooperation of local and institution IT staff.

Also all Campus Area Networks that have been installed during the last two years have been required to use "Home Run" fiber to each building.

2. Summarize the extent to which the project or expenditure improves customer service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

Response:
Staff complete training at the desktop using video and other training materials.

Efficiently and effectively exchange data with other state agencies and citizens.

Provide the needed bandwidth to support internal security cameras.

This system serves state and contract employees in the excess of 260 positions.

Provide the needed resources for providing training and counseling for students enrolled in Residential Substance Abuse Training (RSAT).

3. Identify the main project or expenditure stakeholders and summarize the extent to which each, especially citizens, is impacted. In particular, note if the project or expenditure helps reconnect Iowans to State government.

Response:
Provide training to 260+ positions at the State Training School at their desktop which would allow them to remain at their work location for the training.

Students committed to the institution could receive counseling and complete the required training.

The state would be safer for citizens as a result of the students completing rehabilitation program.

SECTION II: PROJECT ADMINISTRATION

A. Agency Information

1. Project Executive Sponsor Responsibilities: The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

Response: No response required.

2. Organization Skills:
   a. List the project management skills necessary for successful project implementation
   b. List the project management skills available within the agency
   c. List the source(s) of project management skills lacking within the agency
   d. Summarize relevant agency project management experience and results

Response:
a. Skills to install and test electronic and fiber equipment.
Knowledge to determine needed equipment.

b. Persons in the Department of Human Services - Department of Data Management and Bill Harner have the knowledge to install and test the equipnment.

c. Department of Human Services - Department of Data Management contract employee will provide the knowledge of what equipment is needed.

d. The Department of Human Services - Department of Data Management and Bill Harner have installed and provided the support needed to keep the present system operating.

B. Project Information

1. History:
   a. Is this project the first part of a future, larger project? If so, please explain.
   b. Is this project a continuation of a previously begun project? If so, please explain project history, current status, and results.

Response:
a. No

b. Fiber has been installed to all buildings, but at the time the electronics were installed it was designed to utilize the "daisy chain" approach. Since the Campus Area Network has been installed the Department of Human Services - Department of Data Management has implemented revised requirements that include the running of dedicated fiber to each location or building.

2. Expectations: Describe the primary purpose or reason for the project.

Response:
The project would make it possible to provide training to staff at the desktop

This project is necessary for compliance with an enterprise technology standard.

Provide the students training and counseling services.

Provide the bandwidth needed to efficiently exchange data and make it possible to view training videos at the desktop.

The Residential Substance Abuse Training (RSAT) program is designed to be completed in a specific living unit. When a student is removed from this unit for disciplinary reasons we must have a means to continue the training. We have the equipment to provide video to the disciplinary but do not have the bandwidth to support it.

With the addition of the new school we will be adding over 100 devices to the network.

Provide the needed bandwidth to support internal security cameras.

3. Measures: Describe the criteria that will be used to determine if the project is successful.

Response:
Staff will complete the required training, this will be documented for each individual.

Students will receive the required education and counseling, this will be documented in the student's monthly progress reports.

4. Environment: List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, etc.).

Response:
Training videos will be developed by State Training School staff, in cooperation with the Iowa Deartment of Education.

Training videos will be developed by Addition Management Systems staff for use for student training.

Videos developed by the Department of Human Services will be used for training.

Addiction Management Systems staff will provide live training to students via the network.

Training videos purchased from various vendors will be utilized for training of staff and education of students.

5. Risk: Describe the project risks which may be internal or external to State government, i.e. implementing versus not implementing project, changing technology, potential cost overruns, changing citizen demand or need, etc.

Response:
The lack of staff training, and/or the cost of providing coverage in the absence of staff while they are attending training if the project isn't implemented.

The added bandwidth will be available for use on the network.

Without the bandwidth the use of security cameras will not be possible.

This is being planned using the latest in electronics equipment.

6. Security / Data Integrity / Data Accuracy / Information Privacy
   a. List the security requirements of the project
   b. Describe how the security requirements will be integrated into the project and tested
   c. Describe what measures will be taken to insure data integrity, data accuracy and information privacy.

Response: All fiber strands will have been tested to verify operation.

7. Project Schedule
   Describe general time lines, resources, tasks, checkpoints, deliverables, responsible parties, etc.

Response:
July 2002 - Bill Harner order Cisco electronic equipment.

September 2002 (or when equipment arrives) Bill Harner and Department of Human Services - Department of Data Management staff will install and test the equipment.

November 2002 - Have equipment installed, tested and operating.

SECTION III: TECHNOLOGY (In written detail, describe the following)

A. Current Technology Environment

1. Software (Client Side / Server Side / Midrange / Mainframe):
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external

Response: Not Applicable

2. Hardware (Client Side / Server Side / Mid-range / Mainframe):
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external

Response:

a. Ethernet, Windows NT.
b. NA
c. There are 100 Megabits between each of the Cisco 3000 switches which are "daisy chained". The bandwidth is shared with each of the locations in the "chain". In one example there are 4 locations in one "chain".
d. The network moves data from the campus Area Network central location to the other building number 20, but physically must go through three other Cisco switches to get to building number 20.
e. T1 to DHS Wide Area Network.

B. Proposed Technology Environment

1. Software (Client Side / Server side / Mid-range / Mainframe)
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external
   d. General parameters if specific parameters are unknown or to be determined

Response: Not Applicable

2. Hardware (Client Side / Server Side / Mid-range / Mainframe)
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and Bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external
   f. General parameters if specific parameters are unknown or to be determined

Response:
a. Ethernet, Windows NT.
b. NA
c. 100 Megabits of bandwidth dedicated to each location, except between the Central location and the school building which is 1 gigabit bandwidth.
d. The logical and the physical would be the same with the connection being dedicated from the central location to each building (home run).
e. T1 to DHS Wide Area Network.
f. NA

C. Data Elements

If the project creates a new database, provide a description of the data elements.

Response: Not Applicable

SECTION IV: Financial Analysis

A. Budget: Enter figures and calculate (see formula below) Total Annual Prorated Cost (State Share).

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right)\times \%\ State\ Share\right]+\left(Annual\ Ongoing\ Cost\times \%\ State\ Share\right)=Annual\ \text{Pr}orated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$0	1	%	$0	%	$0
Software	$0	4	%	$0	%	$0
Hardware	$43243	3	100%	$0	%	$14414
Training	$0	4	%	$0	%	$0
Facilities	$0	1	%	$0	%	$0
Professional Services	$0	4	%	$0	%	$0
ITD Services	$0	4	%	$0	%	$0
Supplies,	$4512	1	100%	$4512	100%	$4512

Maint, etc.								
Other (Specify)	$0	1	%	$0	%	$0
Totals	$47755	-------	-------	$4512	------	$18926

Transfer this amount to the ROI Financial Worksheet, item “D” on page 14.

B. Funding: Enter data or provide response as requested

1. This is (pick one):
   - ☐ A Pooled Technology Fund or Reengineering Fund Request
   - ☒ An Agency IT Expenditure or Budget Request (General Fund, Road Funds, etc)
   - ☐ Other – Specify:

2. On a fiscal year basis, enter the estimated cost by funding source?

	FY03		FY04		FY05	
	Cost ($)	% Total Cost	Cost ($)	% Total Cost	Cost ($)	% Total Cost
State General Fund	$47755	100%	$4512	100%	$4512	100%
Pooled Tech. Fund	$	%	$	%	$	%
Federal Funds	$	%	$	%	$	%
Local Gov. Funds	$	%	$	%	$	%
Grant or Private Funds	$	%	$	%	$	%
Other Funds (Specify)	$	%	$	%	$	%
Total Project Cost	$47755	100%	$4512	100%	$4512	100%

If applicable, summarize prior fiscal year funding experience for the project / expenditure.

Response: Not applicable.

1. On a fiscal year basis, how much of the total ($ amount and %) project / expenditure cost would be absorbed by your agency from normal operating budgets (all funding sources)?

Response: None

2. Identify, list, and quantify all new annual ongoing (maintenance, staffing, etc.) related costs (State $s) that will be incurred after implementation or expenditure.

Response: Added cost of service contracts on the new switches will be $4,512 yearly.

C. ROI Financial Worksheet: Respond to the following and transfer data to the ROI Financial Worksheet (see IVC11) as necessary:

1. Annual Pre-Project Cost – Quantify all actual state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation. This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation.

Response: Not Applicable

2. Annual Post-Project Cost – Quantify all estimated State government direct and indirect costs associated with activity, system or process after project implementation. This section should be completed only if State government operations costs are expected to be reduced as a result of project implementation.

Response: Not applicable

3. State Government Benefit -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost." This section should be completed only if State government operations costs are expected to be reduced as a result of project implementation.

Response: Not applicable

4. Citizen Benefit – Quantify the estimated annual value of the project to Iowa citizens**.** This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time savings and $.325 per mile for travel cost savings.

Response: Not applicable

5. Opportunity Value/Risk or Loss Avoidance Benefit – Quantify the estimated annual non-operations benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response: Not applicable

6. Total Annual Project Benefit -- Add the values of all annual benefit categories.

Response: Not applicable

7. Total Annual Project Cost – It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related. Completing Section IV-A, Project Budget of the evaluation document will provide all the necessary information for this item.

Response: $18,926

8. Benefit / Cost Ratio – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost." If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

Response: -0-

9. ROI -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the requested State IT project funds.

Response: -0-

10. Benefits Not Readily Quantifiable -- List the project benefits which are not readily quantifiable (i.e. IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.). Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Readily Quantifiable" box in the applicable row.

Response:
Compliance with an enterprise technology standard. - 10

Safer society as a result of students getting the needed education and counseling. - 8

Staff will receive the required training more efficiently. - 9

11. ROI Financial Worksheet

Annual Pre-Project Cost - How You Perform The Function(s) Now	
FTE Cost (salary plus benefits):	$0
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$0
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0
A. Total Annual Pre-Project Cost:	$0
Annual Post-Project Cost – How You Propose to Perform the Function(s)	
FTE Cost:	$0
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$0
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0
B. Total Annual Post-Project Cost:	$0
State Government Benefit (= A-B):	$0
Annual Benefit Summary	
State Government Benefit:	$0
Citizen Benefit:	$0
Opportunity Value or Risk/Loss Avoidance Benefit:	$0
C. Total Annual Project Benefit:	$0
D. Annual Prorated Cost (SECTION IV-A):	$18926
Benefit / Cost Ratio: (C / D) =	0
Return On Investment (ROI): (C – D / Requested Project Funds) x 100 =	0%
☒ **Benefits Not Readily Quantifiable**	

Section V: ITC Project Evaluation Criteria

Criteria and Location in Project Evaluation Document		Points
1.	Is the project a statutory requirement; legal requirement; federal or state mandate; health, safety or security requirement or issue; and/or required for compliance with the enterprise technology standards? **Location: Section I-A**	**15**
2.	Will the project improve customer service? **Location: Section I-B.2**	**15**
3.	Does the project have a direct impact on citizens? To what extent does the project help reconnect state government with Iowans? **Location: Section I-B.3**	**10**
4.	Does the project provide a sufficient tangible and/or intangible return on investment? Will it generate savings or income? **Location: Section IV-C**	**10**
5.	Does the project make use of information technology and its practical application in reengineering traditional government processes consistent with the goals and objectives of the state's strategic plans? **Location: Section I-B.1**	**10**
6.	Risk: What are the risks associated with the project? Such risks may include those internal and external to state government, the risk of doing a project, the risk of not doing a project, and the risks associated with changing technologies, potential cost overruns, and changing citizen demands and needs. **Location: Section II-B.5**	**10**
7.	Is this funding required to continue a project that was begun prior to the year funding is being requested for and does it have proven past performance? Is the funding part of a multi-year strategy? **Location: Section II-B1, IVB2**	**10**
8.	Will the project be for only one agency, multiple agencies, or the state government enterprise? **Location: Section I-B3, IIB4**	**10**
9.	Has the applicant maximized their own and other resources in the project? Is alternative funding unavailable for this project? (If no other funding available, project will not be completed without Pooled Technology funding) **Location: Section IV-B.2, IV-B.3**	**5**
10.	What is the credibility of the requester based on past performance on other projects? **Location: Section II-A.2.d**	**5**
	Total	**100**